

# **F-600**

# **Color Image Scanner**

User's Manual

(D/N 250-0158-E Rev. A)

**AOC International, Ltd.**

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## **FCC Radio Frequency Interference Statement**

This equipment has been tested and found to comply with the limits for a class B digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communication. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- \* Reorient or relocate the receiving antenna.
- \* Increase the separation between the equipment and receiver.
- \* Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- \* Consult the dealer or an experienced radio/TV technician for help.

**CAUTION:** Any changes or modifications not expressly approved by the manufacture of this device could void the user's authority to operate the equipment.

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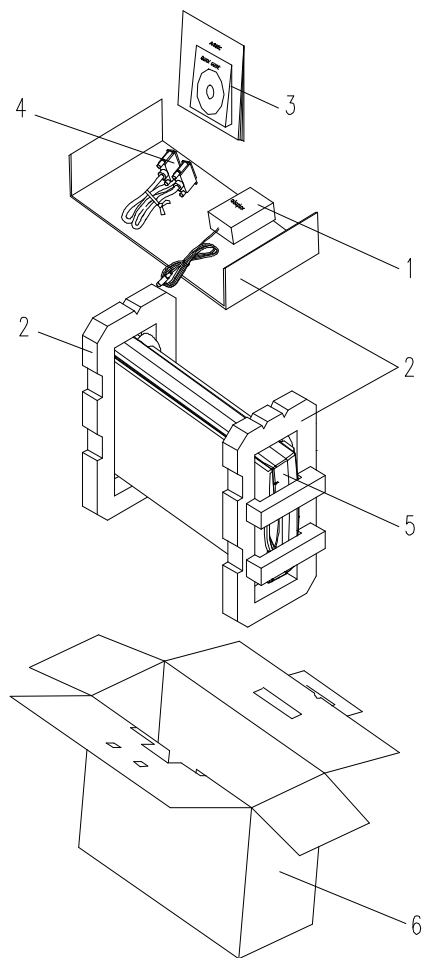
# ***1. Introduction***

Congratulations on your purchase of AOC F-600 color image scanner. The F-600 is compact and small to save desk space.

You can scan both normal printing material including photographs as well as the transparency to store them into your computer. Then you can modify them for a variety of purposes on your computer.

The following sections introduce the unpacking, hardware and software installation, the operation, and maintenance information to you. Please do take a few minutes to read through them to keep quality scanning result possible.

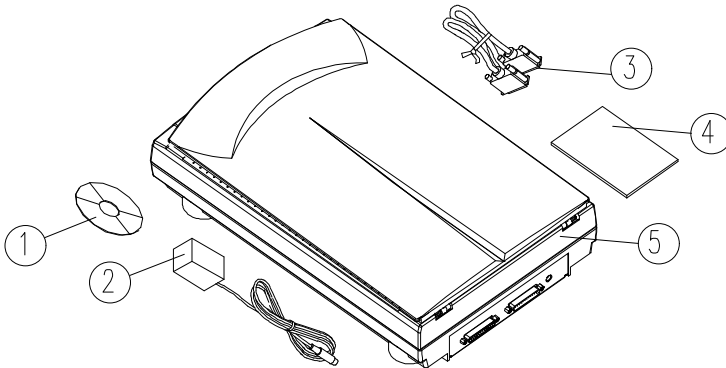
Figure 1-1 shows how the scanner is packed. Please check all the items against your checklist contained in the box or against Figure 1-1. If there is any missing or damaged, please contact your nearest dealer immediately for the replacement.



1. Power Adapter, 2. Cushion 3. Manual, Driver Kit CD.  
4. D25P Cable, etc 5. Scanner 6. Carton

**Figure 1-1 Scanner packing**

## Package Contents



1. **Software CD**
2. **Power Adapter**
3. **D25 Cable**
4. **Quick installation guide**
5. **F-600 Scanner**

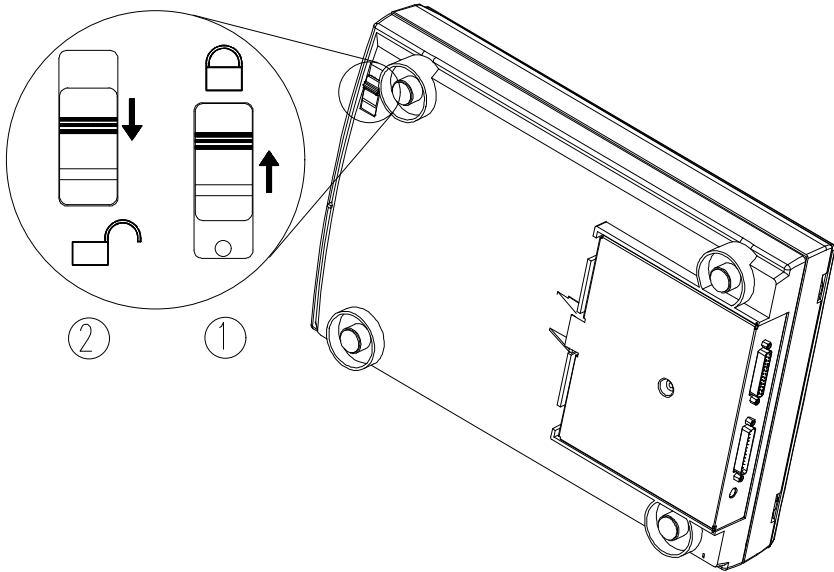
## ***2. Scanner Installation***

### ***2.1 Precautions***

- Keep the scanner out of direct sunlight. Direct exposure to the sun or excessive heat may cause damage to the unit.
- Do not install the scanner in a humid or dusty place.
- Be sure to use the proper AC power source.
- Place the scanner securely on an even, flat surface. Tilted or uneven surfaces may cause mechanical or paper-feeding problems.
- Retain the scanner box and packing materials for shipping purposes.

## 2.2 *Unlocking the Scanner*

As shown below, unlock the scanner by turning the scanner lock to the *Use* position.

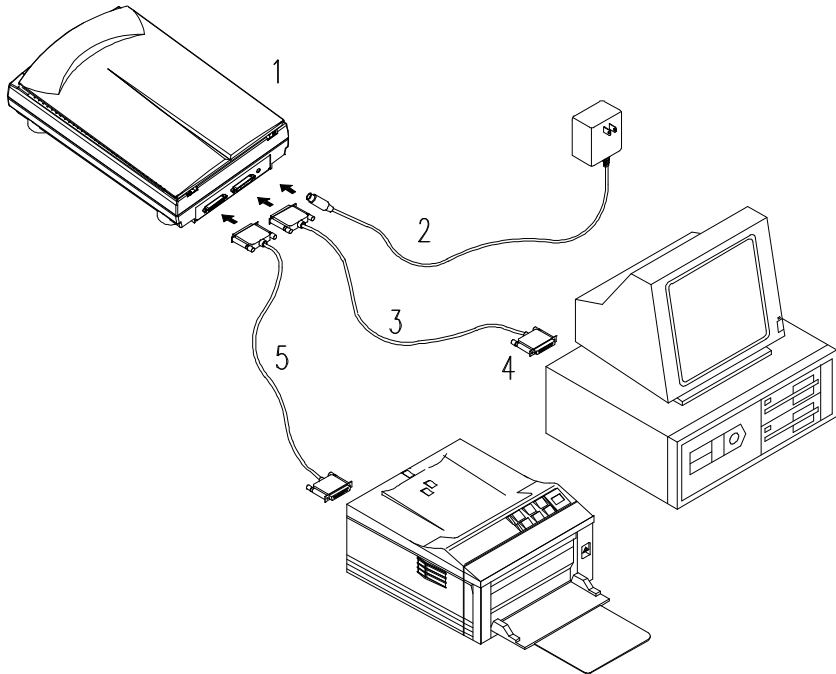


1. “Shipping” Position      2. “Use” Position

**Figure 2-1 Unlocking the Scanner**

### 2.3 *Connecting the Cable*

Connect the power cable and signal cable as shown below.

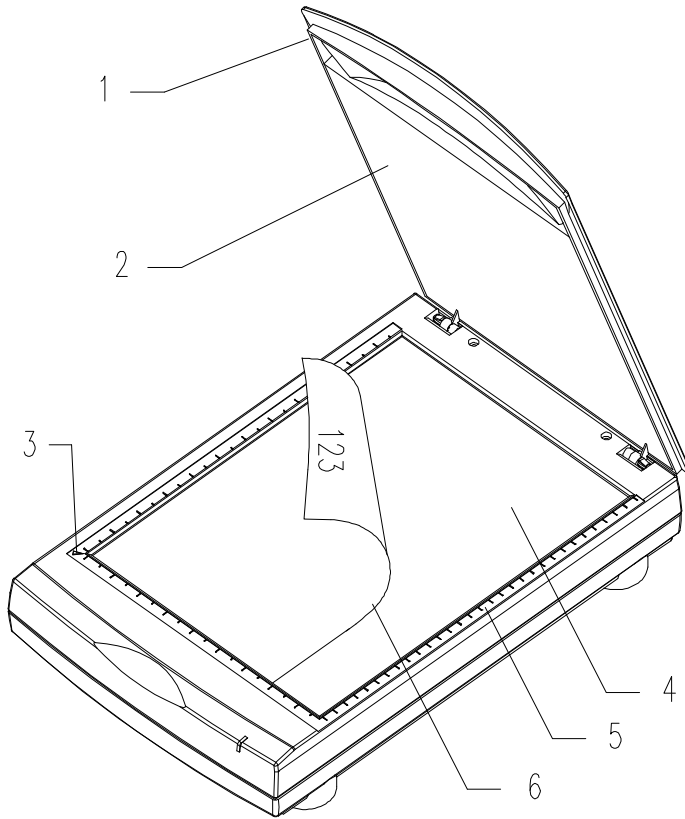


- |                  |                     |
|------------------|---------------------|
| 1. Scanner       | 2. Power Supply     |
| 3. D25P Cable    | 4. PC Parallel Port |
| 5. Printer Cable |                     |

**Figure 2-2 F-600 scanner cable connection**

## 2.4 Document Placement

As shown in Figure 2-3, place the document on the glass with the text facing away from you.



- |                    |                 |
|--------------------|-----------------|
| 1. Document Cover  | 2. Document Pad |
| 3. Reference Frame | 4. Glass        |
| 5. Document Board  | 6. Document     |

**Figure 2.3 Document Placement**

### **3.     *Scanner Driver Installation***

To run at optimum speed, the F-600 color image scanner is recommended to have the following minimum requirements:

- \* IBM compatible PC 386/486, Pentium or later;
- \* Microsoft Windows 3.1, Windows 95, Windows NT;
- \* One printer port available (enhanced parallel port recommended);
- \* 20 Megabytes of available hard disk space for installation;
- \* 8 Megabytes of RAM (16 Megabytes or higher recommended);
- \* A video graphics array (VGA) monitor;
- \* A Microsoft Windows-compatible pointing device (e.g., mouse);
- \* A CD ROM drive.

#### **3.1     *Auto-Installation Program***

Installation procedures of F-600 Scanner driver with AOC Auto-installation Program are as follows:

1. Start Windows 3.1 or Windows 95.
2. Insert F-600 CD into your CD ROM drive.

##### **In Windows 3.1 or higher**

3. From the File Menu, choose RUN, type d:\driver\F-600.exe (d represents the letter for your current CD ROM drive). Click O.K.

### **In Windows 95 or Windows NT**

3. Press the Start button, choose RUN, type d:\driver\F-600.exe (d: the CD ROM drive in use), and then click O.K. (See Figure 3-1,3-2)
4. Follow the on-screen instructions to complete the installation.

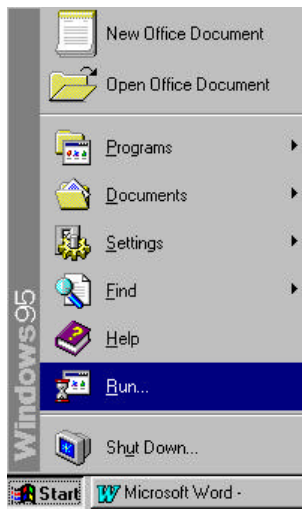


**Fig. 3.1**



**Fig. 3.2**

### **3.2     *Uninstall the Scanner***

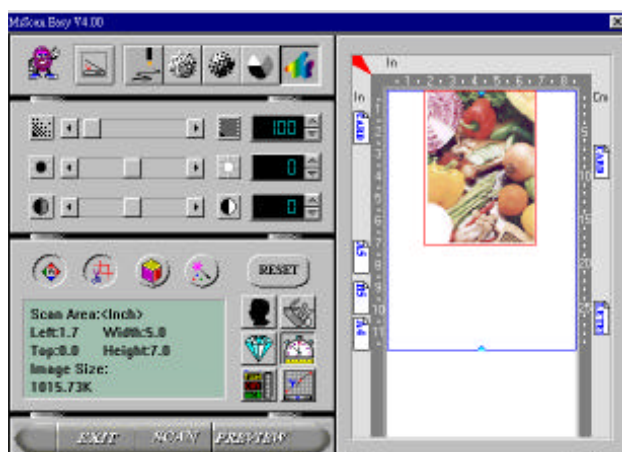
You can uninstall the scanner by selecting  
Start....Programs....AOC Scanner F-600 and double  
clicking on the *Uninstall* command from the AOC Scanner  
F-600.

## 4. ***Scanner Operation & Document Printing***

### **Scanning Images from within an Application (TWAIN)**

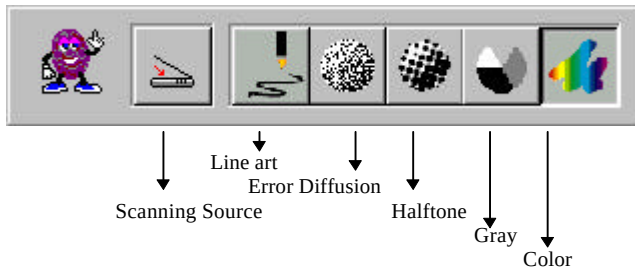
1. Open your application and choose ***Select Source*** from the File menu. If the ***Select Source*** menu options are not available from the File menu, see the user guide of your application to learn how the TWAIN link is used.
2. A dialog box appears containing the different TWAIN sources that you can choose from to bring an image into your application.
3. Select ***F-600/xx VX.xx*** as the source.
4. When you have used the dialog box to select a different source, you will need to select ***F-600*** as the source again before you can reuse the F-600 scanner.
5. Place the image to be scanned face down on the glass.
6. From the File menu, select ***Acquire***.
7. F-600 TWAIN user interface will pop up on the screen. Click on the ***Preview*** or ***Scan*** button to get the image.

F-600 TWAIN user interface:



## 4.1 Image Type

F-600 provides five image types as explain in below:



### *Scanning Source*

Two scanning sources are provided- flatbed as well as transparency.

### *Line art*

Line art presents the image in black and white only and there are no intermediate shades of gray in between.

### *Halftone*

In addition to the black and white display, Halftone can present a somehow gray shade of image by using different size of dots.

### *Error Diffusion*

While taking up but a minimum storage space, error diffusion gives good image texture and excellent image details.

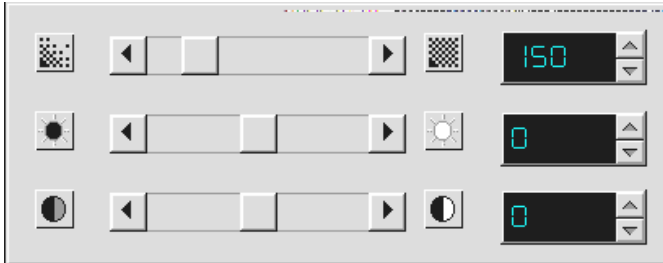
*Gray (256 levels gray scale)*

Gray presents a 256 shades of gray in an image.

*Color (Internal one billion colors)*

The 30 bits True Color presents 16.7 million color and give much more tonal range and details in a color image.

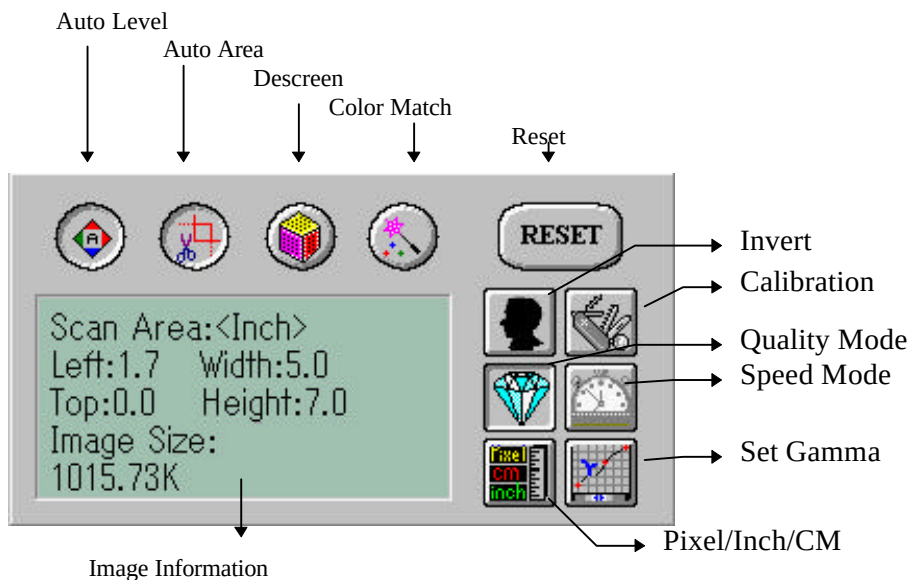
## 4.2 Scanning Parameters & Image Control



**Resolution:** The number of dpi (dots per inch) that F-600 uses for a *scan*. Usually the greater the number, the higher the resolution. Yet up to a certain level, the resolution will not be visually increased but the disk space will be increased.

**Brightness:** Adjusts the lightness or darkness of an image. The higher the value, the brighter the image.

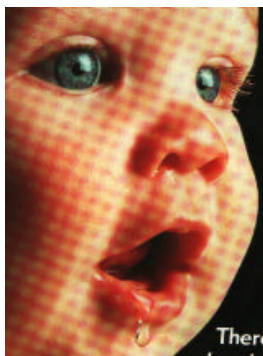
**Contrast:** Adjusts the range between the darkest and the lightest shades in the image. The higher the contrast, the bigger the different gray scales.



**Auto Level:** Optimizes the scanned image.

**Auto Area:** Automatically sets the whole document as the scan area, no matter what its size.

**Descreen:** Eliminates the Moire patterns commonly found in printed matter.



**Before descreen**



**After descreen**

**Color Match:** Adjusts the color quality of the image to make it close to the original. This function uses default parameters to adjust the image.

**Reset:** Resets the scanning parameters you set.

**Invert:** The invert command reverses the brightness and the color in the image. For color images, each pixel will be changed into its complementary color at the command of *Invert*.

**Calibration:** Defines *Brightness* for the scanner. Users are recommended to calibrate the light source if the scanned image looks undesirable or comes out to be too dark.

**Quality/Speed Mode:**

Users can select the mode to perform scanning according to their own need. Select quality mode scanning if your emphasis is on the quality of the scanned image. Or you can select speed mode scanning if you want to speed up the scanning process.

**Pixel/Inch/Cm:**

Represents the different measuring systems to be used in each scan.

**Set Gamma:** Adjusts the midtone of the image yet without losing details of the lightest and the darkest areas at the same time.

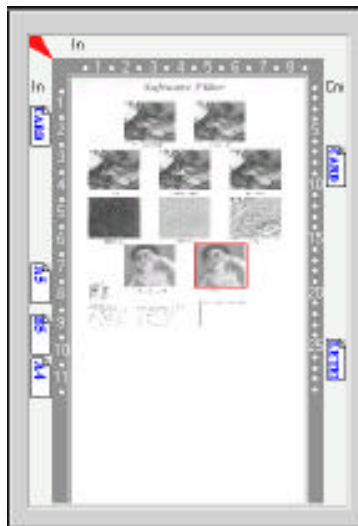
**Image Information:**  
Gives related information of the scanned image.

### 4.3 Scanning



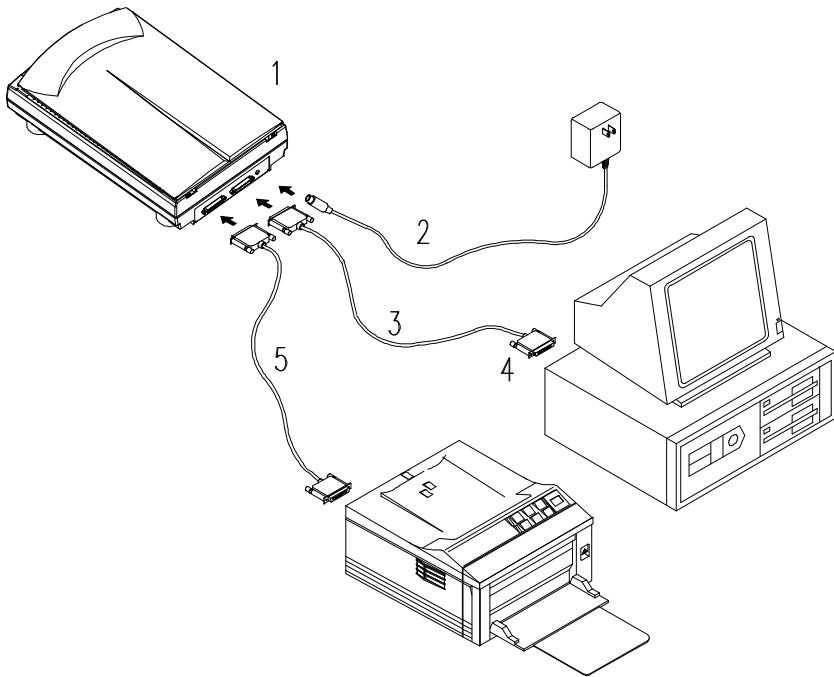
- Preview:**               Previews your image roughly and allocates the area to be scanned.
- Scan:**                 Execute the Scans action.
- Exit:**                 Cancels the current job.
- Document Size:** To designate the size of your document, just click on its icon on the margin of the preview window

As shown in the figure below, in the Preview window, you can define the area to be scanned by dragging the four cursor auxiliary lines.



## 4.4 *Printing*

Connect the printer cable as shown below.



- |                  |                     |
|------------------|---------------------|
| 1. Scanner       | 2. Power Supply     |
| 3. D25P Cable    | 4. PC Parallel port |
| 5. Printer Cable |                     |

### **Caution:**

1. **Be sure to power on the scanner if you want to do pass-through printing.**

2. **Do not scan and print at the same time.**
3. If your PC does not support EPP mode or have pass-through compatibility problem, please contact your authorized local dealer for an EPP card or an additional interface card.

## 5. *Maintenance*

### **Clean the Document Board Glass:**

As shown in Figure 5-1, wipe the scanner glass with a piece of soft clean cloth to rid the glass of dust or toner particles.

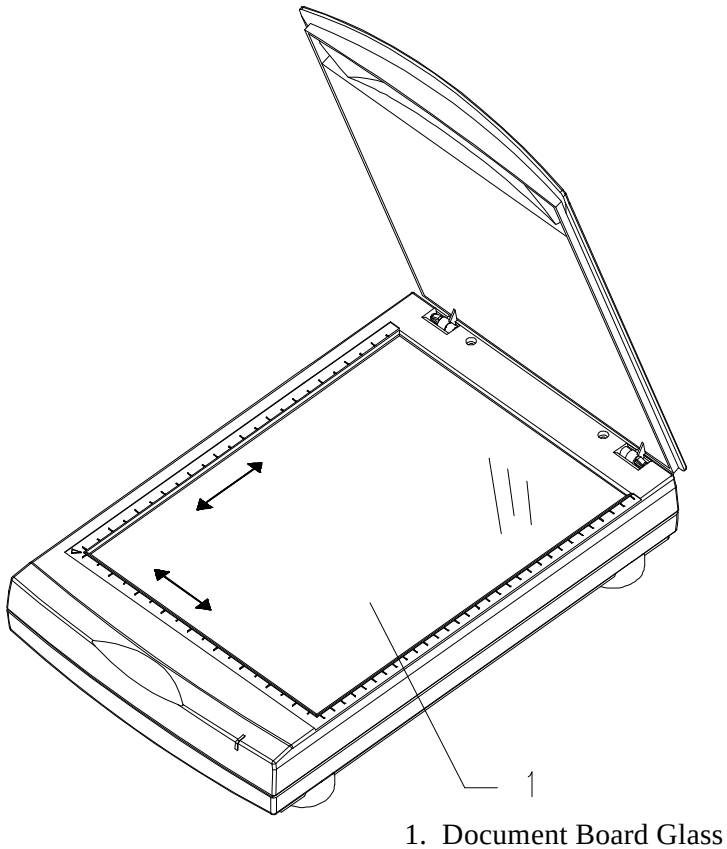


**Figure 5-1 Clean the document board glass.**

## 6. *Troubleshooting*

If you have any operational problem, please check the following troubleshooting hints.

### 6.1 *Questions and Answers*

**Question:** Why the scanned image always comes out to be too dark?

**Answer:** 1) Modify the Gamma setting to 1.8 for your monitor and, when printing, set Gamma to 2.2 for your printer.  
2) Use the Brightness setting of the TWAIN user interface to get a brighter image.

**Question:** The scanning speed of my scanner is much slower than that of those installed at other computers. Can I speed it up?

**Answer:** Set your PC printer port to the EPP mode from BIOS setting.

**Question:** Why does my scanner scan at a very low speed?

**Answer:** If you have installed *Works for Windows*, it will install Window Printing System (WPS) in your WIN.INI file. This will take up the printer port time remarkably. You can remove the WPS from your WIN.INI file, as follows:

From:

*[MS Text Converters]*

MSWorksWin=Works for Windows 2.0,C:\WINDOWS\MSAPPS\TEXTCONV\worksdos.ups

Works forDos 2.0=Works for DOS 2.0\MSAPPS\TEXTCONV\workswin.conups

To:

*[MS Text Converters]*

MSWorksWin=Works for Windows 2.0,C:\WINDOWS\MSAPPS\TEXTCONV\worksdos.cnv

Works for DOS 2.0=Works for DOS 2.0\MSAPPS\TEXTCONV\workswin.con

**Question:** The printer does not print the documents. Why?

**Answer:** Pass-through printing may pose a problem for some printers. It is suggested to add a second printer card for printing purpose, or you may call your authorized local dealer for further support.

**Question:** Does it take long for the scanner to initialize?

**Answer:** If your printer port supports SPP mode only, it takes about two minutes for the scanner to initialize. If your printer port supports EPP mode, the initialization speed is much faster, about 20 seconds.

**Question:** Why sometimes pass-through printing does not work at all?

**Answer:** It may be that you fail to power on the scanner. When doing pass-through printing, please be sure to power on the scanner. Else, without power, the scanner can not transfer the printing data/signals to the printer.

**Question:** Why my GDI printer does not work with the F-600?

**Answer:** Disable the *Auto Scan* function in the application, then your printer will function in normal working condition.

**Question:** Why some parallel port devices and software's keypro do not work with the F-600?

**Answer:** The F-600 can do pass-through printing all right, but the pass-through printing may not work if you connect the parallel port with devices other than printer. Therefore, if you would like to connect some parallel port devices other than printer, please do not connect them to the same parallel port that F-600 currently uses. It is suggested to use other parallel ports to connect these devices or keypro. For instance, you can connect the F-600 to LPT1, and connect other parallel port devices to LPT2. Or you can add a data switch to avoid the problem.

## 7. *Specifications*

**All specifications are subject to change without notice.**

### 7.1 *Model: F-600*

|                     |                                                                                                       |
|---------------------|-------------------------------------------------------------------------------------------------------|
| Scanner Type:       | Flatbed Scanner                                                                                       |
| Optical Resolution: | Up to 300 dpi * 600 dpi<br>(H*V)                                                                      |
| Maximum Resolution: | 9600 dpi                                                                                              |
| Scanning Modes:     | Black & White mode<br>Halftone mode (64-step)<br>Error diffusion<br>10-bit gray scale<br>30-bit color |
| Document Size       | A4, B5, A5, business card                                                                             |
| Interface:          | Printer port (supports<br>SPP/EPP for PC)                                                             |
| Power Source:       | 100Vac~240Vac,<br>50~60Hz, external                                                                   |
| Power Consumption:  | 12 watts (12Vdc,1A)                                                                                   |
| Dimensions: (WxDxH) | 399 x 260 x 72 (mm)                                                                                   |
| Weight:             | 2.7kg                                                                                                 |

# **EC Declaration of Conformity**

**According to EN45014**

**Manufacturer's Name:** AOC International, Ltd.

**declare that the product**

**Model Number :** F-600

**conforms to the following Product Specifications:**

**Emission:** EN 50081-1 (1992)  
EN 55022 (Class B)  
(Conducted Radiated) (1994)  
EN 60555-2 (Harmonics) (1987)  
EN 60555-3 (Flicker) (1987)

**Immunity:** EN50082-1 (1992)  
IEC 1000-4-2 (ESD) (1995)  
IEC 1000-4-3 (RS) (1995)  
IEC 1000-4-4 (EFT/Burst)  
(1995)  
IEC 1000-4-5 (SURGE) (1995)